TELEVISION SCHEMATIC

TELEVISION SCHEMATIC continued

A B C D

VOLTAGES TAKEN WITH SIGNAL
ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2
A PHOTOFACT STANDARD NOTATION SCHEMATIC WITH SCHEMATIC 3
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SEE Q923 BASE PAGE 2E

IF TO TUNER

TUNER NOT INCLUDED IN THIS COVERAGE

AGC TO TUNER

RF AGC RANGE 5.2V TO 6.6V

IF AGC RANGE 3.7V TO 5.0V

ALTERNATE CIRCUIT USED IN SOME MODELS

ALTERNATE CIRCUIT USED IN SOME MODELS

TAKEN WITH BAR SWEEP GENERATOR

TAKEN WITH BAR SWEEP GENERATOR

ALTERNATE CIRCUIT USED IN SOME MODELS

△ TAKEN FROM COMMON TIE POINT ▽

△ TAKEN FROM COMMON TIE POINT ▽

HV RANGE 25.0KV TO 27.0KV

SEE C0901 PIN 40 PAGE 2E

SEE C0901 PIN 37 PAGE 2E

SEE C0901 PIN 39 PAGE 2E

SEE C0901 PIN 38 PAGE 2E

SEE C0901 PIN 36 PAGE 2E

SEE IC902 PIN 3 PAGE 2F

SEE IC902 PIN 82 PAGE 2F

SEE IC901 PIN 41 PAGE 2E

SEE IC901 PIN 42 PAGE 2E

SEE IC901 PIN 43 PAGE 2E

SEE IC901 PIN 44 PAGE 2E

SEE IC901 PIN 45 PAGE 2E

SEE IC901 PIN 46 PAGE 2E

SEE IC901 PIN

SYSTEM CONTROL SCHEMATIC

VOLTAGES TAKEN WITH SIGNAL

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2

A PHOTOFACT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®

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75 INPUT — 270pF 125VAC — 270pF 125VAC — RF TO TUNER

CA101 .0022 250V — CA102 .0022 250V

REMOTE RECEIVER 4.6V (G, S, B+) — R926 1000 — R913 22K — C902 .001 — R914 56 — D907 1N4148 — 5 5.4V — C955 47µF

X901 4MHz — C905 22pF NPO — C906 22pF NPO

RM-238EC IC901 MPU

IR IN 5.2V — X-TL1 1.9V — X-TL2 1.8V — GND — K0 3.8V — K2 4.6V — K1 4.6V — f 4.6V — a 4.6V — b 4.6V — c 4.6V — d 4.6V — e 4.6V — RESET — VCC — OSC IN 1.7V — OSC OUT 1.7V — AFT IN .1V — HOLD 4.9V — AV1 0V — VERT SYNC 3.4V — MPX-MODE 0V — HORIZ SYNC — TIME-LED 0V

SW02 CAPTION STANDARD — SW901 POWER — D916 1N4148 — PART OF CN903 330pF

SW902 VOL DOWN — VOL UP — P. MODE UP — P. MODE DOWN — CH. DOWN — CH. UP — D914 1N4148 — D915 1N4148 — D911 1N4148 — PART OF CN903 330pF

R995 1000 — R994 1000 — R993 1000 — R992 1000 — R991 1000

R919 82K 5.2V — R918 82K 5.2V — R917 82K 5.2V — R916 82K 5.2V — R915 82K 5.2V — R920 82K 5.2V

PART OF CN904 330pF — DO NOT MEASURE — R924 82K 5.0V — PART OF CN904 330pF

C907 30pF NPO — L901 — R921 10K — C909 12pF NPO

Q923 KSC815 AFT AMP — SEE IC101 PIN 14 PAGE 2A — R114 22K — R115 33K — C114 .01 — 9.0V

R900A 12K 2W — R900B 15K 2W — ZD900 MTZ13A 13.0V — 157V — D902 1N4148 — R908 15K — C951 .1 63V — ZD901 MTZ5.1B 5.1V — 5.4V

SEE IC501 PIN 24 PAGE 2A — R951 10K

C971 .0047 — R953 10K — C912 100pF NPO — D950 1N4148

Q905 KSC815 HORIZ AMP — SEE T444 PIN 3 PAGE 2C — R952 1000 — 5.2V

OSD-R 0V — OSD-B 0V — OSD-G 0V — CA-ENABLE 0V — DATA 0V — CLOCK 0V — ENABLE 0V — BLANK 0V

RC19 1000 — RC22 680 — RC17 1000 — RC25 680 — RC18 1000 — RC23 680

SEE Q201 EMITTER PAGE 2B — QC01 KSC815 VIDEO AMP 4.5V 3.9V 12.0V — RC07 150 — RC21 200 — RC15 470 — CC01 .1 63V — CC08 560pF

VIDEO IN 1.9V — IC902 Z8612812PSC CLOSED CAPTION DECODER

ENABLE .03V — CLOCK 0V — DATA 0V — HORIZ SYNC 3.8V — BLANK 0V — R 0V — B 0V — G 0V — RESET 4.6V — VCC — VCC

RC10 10K — RC09 10K — RC08 10K — RC13 1000

RC05 100 — DC06 1N4148 — R543 4700 — C535 .001 — CN01 CNA01 OR OR — Q534 KSC2330 RED OSD 140V — VRC01 BIAS 500 — SEE Q531 COLLECTOR PAGE 2D

RC03 100 — DC08 1N4148 — CN01 CNA01 0B 0B — R549 4700 — C537 .001 — Q536 KSC2330 BLUE OSD 133V — VRC03 BIAS 500 — SEE Q533 COLLECTOR PAGE 2D

RC04 100 — DC07 1N4148 — R546 4700 — C536 .001 — CN01 CNA01 0G 0G — Q535 KSC2330 GREEN OSD 147V — R547 300 — SEE Q532 COLLECTOR PAGE 2D

CC02 .1 63V — CC06 .1 63V — CC04 .015 — RC12 5600 (8200) — RC16 10K — DC01 1N4148 — CC07 1µF — 7 5.2V

NC 4 0V LUM — 9 GND — 10 GND — 16 NSIN — 12 2.0V SSL — 13 1.7V HLF

RC11 6800 — CC10 560pF

TUNER NOT INCLUDED IN THIS COVERAGE

R971 820 — DATA TO TUNER — R974 3300 — R970 820 — CLOCK TO TUNER — R973 3300 — R972 820 — ENABLE TO TUNER — R975 3300 — SEE Q911 BASE PAGE 2C — SEE IC501 PIN 13 PAGE 2C

R956 5600 — C966 100pF NPO — CN901 330pF — 6 330pF 3 330pF 4 330pF 5 330pF 2 330pF 1

R949 9100 (39K) — R950 39K — 13 12.0V — C959 10µF

TINT 3.3V — R931 4700 (22K) — SEE IC501 PIN 1 PAGE 2C

COLOR 5.1V — R935 51K (22K) — R940 13K (4700) — 13 12.0V — C957 10µF

SHARPNESS 4.9V — R946 15K (20K) — R944 18K (20K) — R968 20K (27K) — SEE IC501 PIN 3 PAGE 2C — C964 10µF

BRT 5.4V — R933 4700 (39K) — R941 1000 (3600) — R966 18K (22K) — SEE IC501 PIN 7 PAGE 2C — C962 10µF

CONTRAST 10.7V — R934 16K (2700) — R937 6800 (2700) (1500) — R967 27K (43K) — SEE IC501 PIN 5 PAGE 2C — C963 10µF

VOLUME .8V — R947 39K — D908 1N4148 — SEE Q912 BASE PAGE 2B

PART OF CN902 330pF — 2 330pF 3 330pF 4 330pF 5 330pF 6 330pF 7 330pF — R942 12K — R925 15K — R939 56 (82) 2W — L100 — C156 470µF — B+ TO TUNER

AVO 0V — SEE OV003 BASE PAGE 2B — SEE RL91 RELAY CONTACTS PAGE 2D — BP(5V) TO TUNER

POWER 4.5V — R912 6800 — Q909 KSC2331 SWITCH .09V .7V — R964 6800 — D906 1N4003 — PART OF RL91 POWER — R225 56 (22) 2W — L939 — ZD903 MTZ5.1B 5.1V — C958 10µF

LED01 SL-5R RED — TIMER — R965 1200 — PART OF CN902 330pF — C972 470µF — R904 36 — R909 12K — R910 12K — ZD904 EQB01-33 33.0V — C960 10µF — C919 .01 — BT (33V) TO TUNER

REMOTE TRANSMITTER (RM238EC)

SLEEP — POWER — TV/VIDEO — VOL UP — VOL DOWN — MUTE — CH DOWN — PRE-CH — CH UP — 0 — FINE UP — TIMER — ERASE — FINE DOWN — MENU — ADD — MODE DOWN — RECALL — P-MODE — MODE UP — +100 — TV/CATV — STD — AUTO PRG

KS51900 IC1 ENCODER

D5 1N4148 — D4 1N4148 — D2 DAN202K — D6 1N4148 — D3 DAN202K — D7 1N4148

C3 .1 — C2 100pF — Z1 455kHz — C1 100pF

2SD1781 Q1 AMP — R1 27 — R2 1K — D1 IR LED 56S83 — C4 4.7µF — R3 560K — BATTERY 3V

E

F